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Remarks/arguments:

This amendment is in response to the office action of March 8, 2005. By the present amendment claim 1 has been amended to incorporate the subject matter of claims 2 and 4, which have been cancelled. This is to set forth the feature that the rotational axis of the fan is transverse to the optical axis. The purpose of this design is so that the flow of air may efficiently be directed from one side of the polymerization device to the other. With this invention, both suction air and blowing air are completely prevented from touching the patient and the dentist, and there is no teaching in the cited prior art documents how to attend to this.

The examiner has rejected claims 1-4 as fully met by the German patent 34 11 996. However, it is respectfully submitted that this reference does not show the features set forth in claim 1 and the remaining dependant claims. Claim 1 require "a light source (14) mounted within the housing (12) and which emits polymerizing radiation along an optical axis (76); and an axial fan (26) installed in the housing (12), the rotational axis of the fan being transverse to the optical axis (76) for creating a flow of cooling air which moves along a path generally transverse to the optical axis (76) of the light source (14)." Clearly the German reference does not teach these features. His fan is mounted in the handle base and is at a 45° degree angle to his optical axis as shown in FIG. 5, or at a 30° degree angle as shown in FIG. 1. Clearly these angles would not dispose the rotational axis of his fan "transverse to the optical axis". Accordingly, the examiner is respectfully requested to withdraw the rejection of claims 1-4 (now claims 1 & 3) as fully met by German 3411996.

The examiner has next rejected claims 1-3, 7, 12 and 14 as "clearly anticipated by Gill et al." Paragraph [0034] of Gill makes reference to a fan 54 which is shown in FIG. 2. It is stated that the fan "is used to direct or force air over the heat sink 51 and/or the light emitting structure 20." From the figure and the text it would appear that the axis of the fan (which is not illustrated) is parallel to the optical axis, not transverse. Furthermore, it would appear that the examiner may be in error when he states that "the flow of cooling air moves along a path transverse to the optical axis." There is nothing in the text of the publication or in the drawings which will conclusively support this statement. Accordingly, the examiner is respectfully requested to withdraw this grounds of rejection.

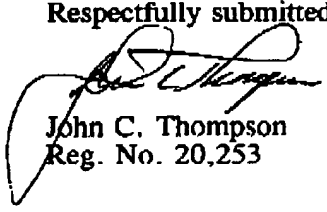
The examiner next rejects claim 1-19 as unpatentable over the combination of Lienhard and Shikamo et al. While Lienhard discloses a light polymerization device for polymerizing dental material, comprising a housing, and a light source mounted within the

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housing and which emits polymerizing radiation along an optical axis as required by claim 1, he does not disclose "an axial fan (26) installed in the housing (12), the rotational axis of the fan being transverse to the optical axis (76) for creating a flow of cooling air which moves along a path generally transverse to the optical axis (76) of the light source (14)." The examiner in his rejection acknowledges that Lienhard does not disclose a fan in the housing. The examiner further states that it would have been obvious to modify Lienhard by Shikamo. Initially, there is not reason for such a modification other than to meet the terms of the claims. Secondly, Shikamo does not teach the subject matter quoted above. Accordingly, the examiner is respectfully requested to withdraw this grounds of rejection.

In that all of the claims are deemed to be allowable for the reasons set forth above, the allowance of this application is respectfully requested in the absence of more relevant prior art.

Respectfully submitted,



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